## The All Transactions House Price Index (HPI) for Maryland's MSAs, 1995 – 2009

## All Areas in Maryland See Declines, but Some Decline More Than Others

Like the nation as a whole, Maryland has seen a dramatic increase in housing unit values in the past 10 years, followed by an equally dramatic decline. However, this boom and bust in housing values has not been evenly distributed across the state. The Washington-Arlington-Alexandria MSA Division (which consists mostly of counties outside of Maryland) had the highest increase in value, with 150 percent price appreciation from 1995:Q1 to its peak quarter of 2006:Q4, while the Cumberland MD-WV MSA had the lowest, with only 50 percent price appreciation to its peak quarter of 2007:Q2. Since the peak, housing Washington-Arlington-Alexandria has decreased in value by 40 percent, while Cumberland has only decreased by 8 percent. For comparison's sake, when change is measured starting in 1995:Q1 the State of Maryland peaked in 2007:Q1 at a 126 percent cumulative price appreciation over 1995:Q1, and by 2009:Q2 that had fallen to an 85.6 percent price appreciation (a 32.1 percent drop).

## **Washington Metro Housing Value Changes**

The Washington-Arlington-Alexandria, DC-VA-MD-WV MSAD had the highest price appreciation of all the MSAs, with a cumulative increase peak of 150.4 percent by 2006:Q4 from 1995:Q1 (See Map 2, Map 3, and Map 4). Since that point, price appreciation has decreased significantly in that MSAD, dropping to 90.1 percent of 1995:Q1 values by the end of 2009:Q2 (a 40 percent drop from the peak) (See Table 2). Home price appreciation in this MSAD is now approximately at the point that it was in 2004:Q3. In other words, a hypothetical single-family detached home that was valued at \$100,000 in 1995:Q1 would have been valued at \$250,400 in 2006:Q4 and would have fallen in value to \$190,100 by 2009:Q2.1

The other portion of the Washington-Arlington-Alexandria MSA, the Bethesda-Frederick-Gaithersburg, MD MSAD, showed similar peaks and declines, gaining 132.9 percent price appreciation from 1995:Q1 by 2006:Q4, and then dropping back to 84.5 percent by 2009:Q2 (a 36 percent drop), so that cumulative price appreciation over 1995:Q2 was roughly equal to the point it was at in 2004:Q3. That hypothetical \$100,000 house in 1995:Q1 would have increased in value to \$232,900 by 2006:Q4 and then decreased in value to \$184,500 in 2009:Q2.

# **Baltimore-Towson Housing Value Changes**

The Baltimore-Towson MSA peaked in 2007:Q1 at 122.7 percent of the 1995:Q1 housing value, and housing there has lost 27 percent of its value from the peak to roughly equal the housing values of 2005:Q2. In 2009:Q2, single-family detached housing units in the Baltimore-Towson MSA were valued at 89.8 percent of their 1995:Q1 valuations. A hypothetical home in this region that was valued at \$100,000 in 1995:Q1 would have been valued at \$222,700 in 2007:Q1 and would now be valued at \$189,800.

## **Eastern Shore Housing Value Changes**

Most of the Eastern Shore is not tracked by the HPI. The exeptions are Queen Anne's County, which is considered to be a part of the Baltimore-Towson MSA described above, Cecil County, which is a part of the

<sup>&</sup>lt;sup>1</sup> All dollar values in this report are adjusted for inflation to 2009:Q2.



much larger Wilmington, DE-MD-NJ Metropolitan Division, or MSAD (which also contains New Castle County, DE and Salem County, NJ), and the Salisbury MSA in the southern portion of the shore.

Housing in the Wilmington, DE-MD-NJ MSAD had much lower price increases than most other Marylandrelated MSAs and MSADs. Single-family home values peaked in 2006:Q4 at 85.2 percent above 1995:Q1 values, and then decreased to 64.1 percent of 1995:Q1 values by 2009:Q2 (a 24.8 percent decrease). The hypothetical home in this MSAD would have increased from \$100,000 in 1995:Q1 to \$185,200 in 2006:Q4, and decreased to \$164,100 by 2009:Q2.

Single-family detached housing in the Salisbury MSA also increased in value at a slower pace than in other parts of Maryland, but saw a higher appreciation rate than in the Wilmington, DE-MD-NJ MSAD. Singlefamily home values peaked in 2007:Q4 in the Salisbury MSA, a year later than in many other areas. Peak value appreciation was at 98.6 percent above 1995:Q1 values, and decreased to 75.3 percent of 1995:Q1 values by 2009:Q2 (a 23.6 percent decrease). The hypothetical home in the Salisbury MSA would have increased from \$100,000 in 1995:Q1 to \$198,600 in 2007:Q4, and decreased to \$175,300 by 2009:Q2.

#### **Western Maryland Housing Value Changes**

Western Maryland is represented in the HPI by the Hagerstown-Martinsburg, MD-WV and Cumberland, MD-WV MSAs. The Hagerstown-Martinsburg, MD-WV MAS had moderate appreciation in single-family detached housing (112.9 percent from 1995:Q1 to 2007:Q1), but then suffered from the largest percentage decline in housing unit value in Maryland after the peak, dropping 45.2 percent from 2007:Q1 to 2009:Q2, when overall price appreciation for the region by 2009:Q2 was 61.9 percent over 1995:Q1. In other words, a hypothetical single-family house in this MSA valued at \$100,000 in 1995:Q1 would have been valued at \$212,900 in 2007:Q1 and would have dropped to \$161,900 by 2009:Q2.

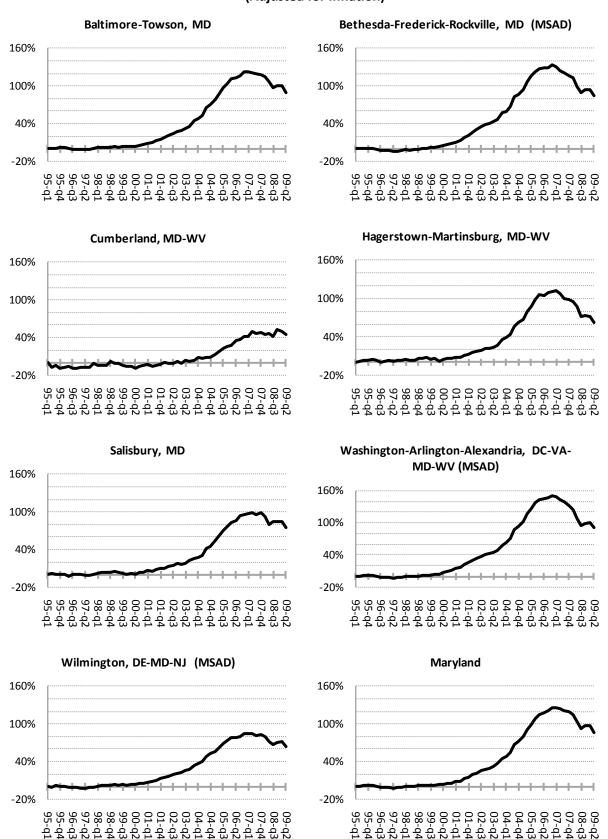
The Cumberland, MD-WV MSA is the westernmost MSA in Maryland tracked by the HPI. It has had much lower price appreciation than in other parts of Maryland (peaking at only 49.5 percent over 1995:Q1 in 2007:Q2), but unlike other MSAs it has had very little depreciation after its peak. By 2009:Q2, the region had only experienced price depreication of 8.0 percent, to 45.5 percent over 1995:Q1. A hypothetical single-family house in this MSA valued at \$100,000 in 1995:Q1 would have been valued at \$149,500 in 2007:Q2 but would have only dropped to \$145,500 by 2009:Q2.

#### **Charting the Changes**

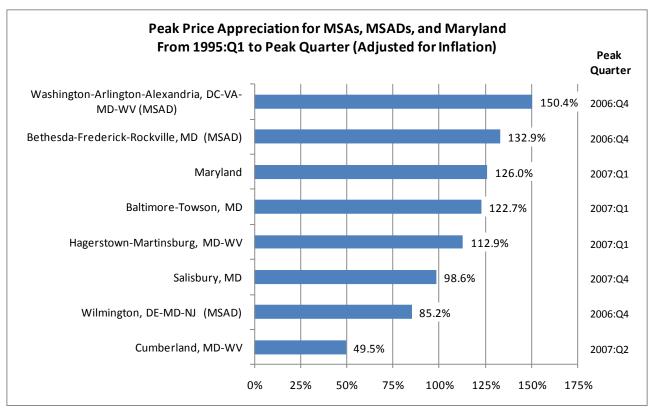
The following eight charts show the inflation-adjusted change in the HPI for each of these MSAs and MSADs and for Maryland. As the HPI data for all MSAs is indexed so that the first quarter of 1995 is set at 100, both housing unit value change and inflation change were calculated forward from that point. This makes the cumulative change percentages reported here different from the ones discussed in the statewide **report**, which was calculated starting from the first quarter of 1975.

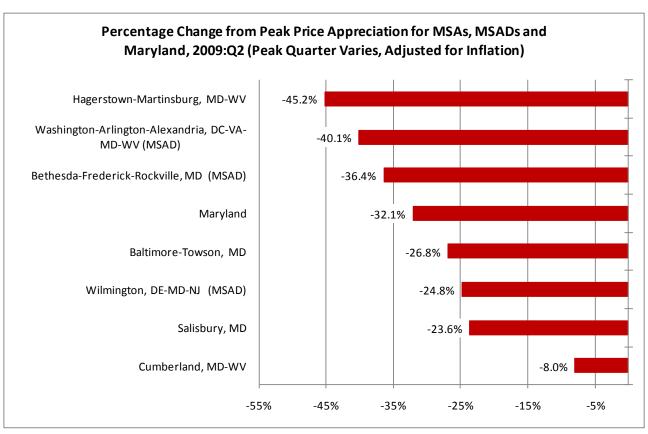
For more information, contact James Palma at <a href="mailto:palma@mdp.state.md.us">palma@mdp.state.md.us</a>.

# All Transactions House Price Index for Maryland's MSAs and MSADs: 1995:Q1 to 2009:Q2 (Adjusted for Inflation)

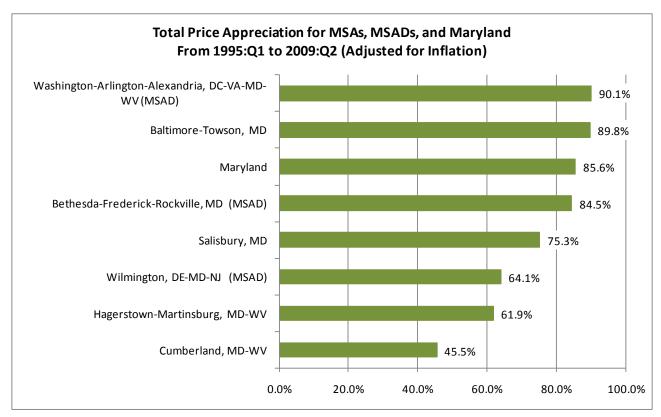


Source: Quarterly House Price Index, Second Quarter 2009, Federal Housing Finance Agency, 2009





Source: Quarterly House Price Index, Second Quarter 2009, Federal Housing Finance Agency, 2009



Source: Quarterly House Price Index, Second Quarter 2009, Federal Housing Finance Agency, 2009

Note that the data in the previous three figures are illustrated in Map 2, Map 3, and Map 4.

#### About the FHFA's All Transactions House Price Index (HPI)

The All Transactions House Price Index (HPI) is a data series formerly published by the Office of Housing Enterprise Oversight (OFHEO) and now published by the Federal Housing Finance Agency (FHFA), a government agency responsible for overseeing the actions of the Federal National Mortgage Association (FNMA), commonly known as Fannie Mae, and the Federal Home Loan Mortgage Corporation (FHLMC), commonly known as Freddie Mac.<sup>2</sup> According to the FHFA, "The HPI for each geographic area is estimated using repeated observations of housing values for individual single-family residential properties on which at least two mortgages were originated and subsequently purchased by either Freddie Mac or Fannie Mae since January 1975."<sup>3</sup> Data from these two sources cover 40 percent of all mortgages issued in the U.S. Restricting the index to existing housing sales helps to control for the effect that differing housing types and characteristics might have on the data. To remove the effects that inflation has on home prices, the HPI was adjusted for inflation using the Bureau of Labor Statistics' Consumer Price Index "All Items Less Shelter" series.5

As this data is published for states and many Metropolitan Statistical Areas (MSAs) within the U.S., it is useful for tracking housing price trends on the state and local level. One fault with this data set is that it only tracks single-family detached housing, which in Maryland only comprises 52 percent of all housing units (61 percent in the U.S. as a whole). Another is that it doesn't capture the price effects that newlybuilt homes may have on the housing market until after they have been sold and resold. Even with these faults, the HPI is useful as it supplies consistent data across the U.S. for tracking home price appreciation trends over a 33 year period.

Number of Housing Units by Units in Structure, Maryland, 3-Year 2005-2007 Estimate

	Estimate	Margin of Error	Percentage	Margin of Error
Total housing units	2,296,973	+/-290	100.0%	
1-unit, detached	1,188,547	+/-5,418	51.7%	+/-0.2%
1-unit, attached	483,342	+/-4,804	21.0%	+/-0.2%
2 units	43,419	+/-2,364	1.9%	+/-0.1%
3 or 4 units	56,672	+/-2,496	2.5%	+/-0.1%
5 to 9 units	126,125	+/-3,502	5.5%	+/-0.2%
10 to 19 units	189,099	+/-3,623	8.2%	+/-0.2%
20 or more units	168,771	+/-3,148	7.3%	+/-0.1%
Mobile home	40,826	+/-1,936	1.8%	+/-0.1%
Boat, RV, van, etc.	172	+/-103	0.0%	+/-0.0%

**Source**: 2005-2007 American Community Survey 3-Year Estimates

The HPI does not track Metropolitan Statistical Areas (MSAs) over the same time series as it does states and the U.S. This is due to rules that supress data for individual MSAs until there are at least 1,000 total

<sup>&</sup>lt;sup>5</sup> Adjusted using series ID# CUUR0000SA0L2 as described in question 17 of the HPI FAQ, available at http://www.ofheo.gov/hpi.aspx?Nav=60.



The All Transactions House Price Index (HPI) for Maryland's MSAs, 1995 – 2009

<sup>&</sup>lt;sup>2</sup> The Federal Housing Finance Agency (FHFA) was created on July 30, 2008 through a legislative merger of the Office of Federal Housing Enterprise Oversight (OFHEO), the Federal Housing Finance Board (FHFB) and the U.S. Department of Housing and Urban Development (HUD) government-sponsored enterprise (GSE) mission team. FHFA regulates Fannie Mae, Freddie Mac and the 12 Federal Home Loan Banks.

<sup>&</sup>lt;sup>3</sup> http://www.ofheo.gov/Media/Archive/house/hpi tech.pdf.

<sup>&</sup>lt;sup>4</sup> For more information, see http://www.ofheo.gov/Media/Archive/house/hpi\_tech.pdf.

transactions that meet the index's criteria. Because of this limitation, only six MSAs in Maryland have published HPIs: Baltimore-Towson, MD; Cumberland, MD-WV; Hagerstown-Martinsburg, MD-WV; Philadelphia—Camden—Wilmington, PA-NJ-DE-MD; Salisbury, MD; and Washington—Arlington—Alexandria, DC-VA-MD-WV. Due to the size of the Washington-Arlington-Alexandria and Philadelphia-Camden-Wilmington MSAs, they are split into MSA Divisions (MSADs): the Bethesda-Frederick-Gaithersburg, MD MSAD, the Washington-Arlington-Alexandria, DC-VA-MD-WV MSAD, and the Wilmington, DE-MD-NJ MSAD, whose only Maryland component is Cecil County (See Map 1).

This data set is also related to, but not the same as, the S&P/Case-Shiller® Home Price Indices published by Standard & Poors. There are four major differences between the S&P/Case-Shiller® Index and FHFA's All Transactions Home Price Index. First, S&P/Case-Shiller® uses only purchase prices to calibrate their index, while FHFA's All Transactions HPI uses both purchase prices and refinance appraisals. Second, S&P/Case-Shiller uses county assessor's data, while FHFA uses data from conforming, conventional mortgages provided by Fannie Mae and Freddie Mac. Third, S&P/Case-Shiller® "value-weights" its index, meaning that more expensive homes have more influence on the index, while FHFA weights all home prices equally. Finally, S&P/Case-Shiller® does not cover 13 states, while FHFA data covers all 50 states. The FHFA created a detailed report that covers the similarities and differences between the two indexes, available at http://www.fhfa.gov/webfiles/1163/OFHEOSPCS12008.pdf.

<sup>6</sup> http://www.ofheo.gov/hpi city.aspx

<sup>&</sup>lt;sup>7</sup> FHFA has a separate index, the Purchase Only HPI, that uses only purchase price data. That index is discussed in the report The House Price Index (HPI) for Purchase-Only Mortgage Transactions in Maryland, 1991 – 2009, also on this website.

#### Metropolitan Statistical Area Definitions as of November 2007 (OMB 08-01)

# Maryland Counties are in **Bold Type**

The following are definitions of each of the six MSAs in Maryland covered by the HPI index. The HPI does not report data for the four Micropolitan Statistical Areas in the state: Cambridge, MD (15700), Easton, MD (20660), Lexington Park, MD (30500), and Ocean Pines, MD (36180) (See Map 1). A full list and description of every current MSA and its components is available from the Office of Management and Budget in its publication entitled OMB Bulletin No. 08 – 01, Update of Statistical Area Definitions and Guidance on Their Uses, published November 20, 2007.

#### Baltimore-Towson, MD Metropolitan Statistical Area (12580)

Anne Arundel County, Baltimore County, Carroll County, Harford County, Howard County, Queen Anne's County, Baltimore city

#### Cumberland, MD-WV Metropolitan Statistical Area (19060)

Allegany County, MD; Mineral County, WV

# Hagerstown-Martinsburg, MD-WV Metropolitan Statistical Area (25180)

Washington County, MD; Berkeley County, WV; Morgan County, WV

#### Salisbury, MD Metropolitan Statistical Area (41540)

**Somerset County, Wicomico County** 

Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metropolitan Statistical Area (37980)

- Camden, NJ Metropolitan Division (15804)
  - o Burlington County, Camden County, Gloucester County
- Philadelphia, PA Metropolitan Division (37964)
  - Bucks County, Chester County, Delaware County, Montgomery County, Philadelphia County
- Wilmington, DE-MD-NJ Metropolitan Division (48864)
  - New Castle County, DE; Cecil County, MD; Salem County, NJ

Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area (47900)

- Bethesda-Frederick-Gaithersburg, MD Metropolitan Division (13644)
  - Frederick County, MD; Montgomery County, MD
- Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division (47894)
  - District of Columbia, DC; Calvert County, MD; Charles County, MD; Prince George's County, MD; Arlington County, VA; Clarke County, VA; Fairfax County, VA; Fauquier County, VA; Loudoun County, VA; Prince William County, VA; Spotsylvania County, VA; Stafford County, VA; Warren County, VA; Alexandria city, VA; Fairfax city, VA; Falls Church city, VA; Fredericksburg city, VA; Manassas city, VA; Manassas Park city, VA; Jefferson County, WV